

0066793

SEVERN
TRENT

STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

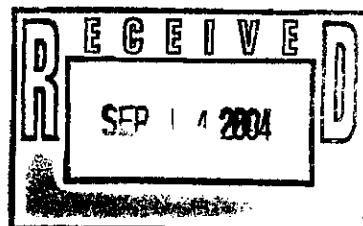
Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 200-MW-1 CHAR.

F04-015

Lot #: F4H120314
SDG #: W04150



Steve Trent

Fluor Hanford Inc
825 Jadwin Ave
Richland, WA 99352

SEVERN TRENT LABORATORIES, INC.

MARTI WARD
Project Manager

RECEIVED
SEP 21 2005
EDMC

September 10, 2004

STL ST. LOUIS

Case Narrative
LOT NUMBER: F4H120314
W04150

This report contains the analytical results for the sample received under chain of custody by STL St. Louis on August 12, 2004. This sample is associated with your F04-015 project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted below.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise.

The samples were analyzed outside the 14-day holding time for soils for all parameters except metals. The lab did not receive the samples until after the holding time had expired.

Observations/Nonconformances

Metals

The MS/MSD recovery for Mercury is outside the established QC limits. The Mercury concentration in the original sample is greater than 4 times the amount spiked, making percent recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery.

The MS recovery for Silver is outside the established QC limits. The RPD is within method acceptance criteria indicating possible matrix interference. Method performance is demonstrated by acceptable LCS recovery. No further action is required.

TPH - Diesel & Kerosene

The Method Blank surrogate recovery is outside acceptance limits. Samples associated with this method blank demonstrated acceptable surrogate recoveries indicating the surrogate excursion is isolated to the method blank and not indicative of the batch.

Case Narrative
LOT NUMBER: F4H120314
W04150

Semi-Volatiles

The LCS recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample extraction efficiency and compliance is demonstrated by the remaining acceptable LCS recoveries.

The MS/MSD recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample extraction efficiency and compliance is demonstrated by the remaining acceptable MS/MSD recoveries.

Volatiles

The MS/MSD recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis.

The surrogate recovery of DBFM is out high in MS, which caused four front end compounds to be out high and the Bromomethane RPD to be out. Sample purge efficiency and compliance is demonstrated by the remaining acceptable MS/MSD and LCS recoveries.

Oil & Grease

The MS/MSD associated with this sample was run on sample B193KO from SDG W04366. both samples were included in the same analytical batch.

STL ST. LOUIS

SAMPLE SUMMARY

F4H120314

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GM17P	001	B195W2	07/21/04	10:54

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

STL ST. LOUIS

METHODS SUMMARY

F4H120314

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
pH Non-Aqueous	SW846 9045A	
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3550
Fluoride	MCAWW 300.0A	MCAWW 300.0A
Hexavalent Chromium	SW846 7196A	SW846 3060A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Nitrate as N	MCAWW 300.0A	MCAWW 300.0A
Nitrate-Nitrite	MCAWW 353.1	
Nitrite as N	MCAWW 300.0A	MCAWW 300.0A
Nitrogen, Ammonia	MCAWW 350.1	MCAWW 350.1
Oil & Grease (Gravimetric)	SW846 9071A	
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Phosphate as P, Ortho	MCAWW 300.0A	MCAWW 300.0A
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Total Cyanide	SW846 9010A	SW846 9010A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
Volatile Petroleum Hydrocarbons	SW846 8015 MOD	SW846 5030

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

FLUOR Hanford Inc.		CENTRAL PLATEAU CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						F04-015-003	Page 1 of 1																																																												
Collector Pope/Pfister/Hughes/Wiberg	Company Contact CS Gearlock	Telephone No. 372-9638			Project Coordinator TRENT, SJ		Price Code 8N	Data Turnaround 45 Days																																																													
Project Designation 200-MW-1 Characterization Sampling and Analysis - Soil	Sampling Location 216-A-4 Crib; 18.5'-21'			SAF No. F04-015		Air Quality																																																															
Ice Chest No. SIN 2/03-050024	Field Logbook No. HNF-N-3861	COA 119144ES10		Method of Shipment Government Vehicle /FED EX																																																																	
Shipped To Severn Trent Waste Sampling & Characterization AT B1/n/04	Offsite Property No. 216-A-4 Crib RSR 0000611			Bill of Lading/Air Bill No. N/A																																																																	
POSSIBLE SAMPLE HAZARDS/REMARKS N/A		Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Noon	Cool 4C																																																													
Special Handling and/or Storage Radioactive Tie To: B19620		Type of Container	aG	aG	aG	aGs*	aG	aG																																																													
		No. of Container(s)	1	1	1	3	1	1																																																													
		Volume	250mL	120mL	250mL	40mL	120mL	500mL	120mL																																																												
W04150 SAMPLE ANALYSIS		See item (1) in Special Instructions	PCBs - 8082	See item (2) in Special Instructions	See item (3) in Special Instructions	See item (4) in Special Instructions	See item (5) in Special Instructions	NO _x /NO _y - 353-23 Oil & Grease 413.1; Chloroform Nex - 7190	item 1 (S)																																																												
Sample No.	Matrix *	Sample Date	Sample Time																																																																		
B19620	SOIL	1/21/04	1034	✓	✓	✓	✓	✓																																																													
CHAIN OF POSSESSION <table border="1"> <tr> <td>Reinquished By/Removed From <i>Karen W</i></td> <td>Date/Time <i>1/21/04 0800</i></td> <td>Received By/Stored In <i>517 FC16 1/21/04</i></td> <td>Date/Time <i>1/21/04</i></td> <td colspan="6">SPECIAL INSTRUCTIONS</td> </tr> <tr> <td>Reinquished By/Removed From <i>Site Edge 8/14/04</i></td> <td>Date/Time <i>0800</i></td> <td>Received By/Stored In <i>517 FC16 8/14/04</i></td> <td>Date/Time <i>0800</i></td> <td colspan="6">** The laboratory is to report both kerosene and diesel range compounds from the WTPH-D analysis. 6010B Supertrace AT 8/11/2004</td> </tr> <tr> <td>Reinquished By/Removed From <i>Greg Thomas Greg Thomas 8/14/04</i></td> <td>Date/Time <i>0800</i></td> <td>Received By/Stored In <i>FED EX</i></td> <td>Date/Time</td> <td colspan="6">(1) IC Anions - 300.0 (Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate); Total Cyanide - 90.0; pH (Soil) - 9045; Ammonia by 350.3 AT 8/11/2004 (2) ICP/MS - 200.4 (Cd-Mg); Cadmium, Chromium, Copper, Silver; 169445 - 200.0 (Add-on); H. carb., Mercury - 100.0; Ni + Cr(VI) (Mercury AT 8/11/2004) Mercury by 71.71 (3) VOA - 8260A (TCL); VOA - 8260A (Add-On) (1-Butanol, cis-1,2-Dichloroethylene, n-Butylbenzene, trans-1,2-Dichloroethylene) (4) Semi-VOA - 8270A (Add-On) (Tributyl phosphate); TPH-Gasoline Range - WTPH-G; TPH-Diesel Range - WTPH-D (Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range) (5) Gamma-Spectroscopy (Gadolinium-157, Cobalt-60, Europium-152, Europium-154, Europium-155, Isotopic Potassium, Isotopic Uranium, Americium-241, Strontium-89.00 - Total Br AT 8/11/04 (5) NO_x/NO_y - 353-23; Oil & Grease - 413.1; Chloroform NEX - 7190</td> </tr> <tr> <td>Reinquished By/Removed From <i>FED EX</i></td> <td>Date/Time</td> <td>Received By/Stored In <i>PLW (JW)</i></td> <td>Date/Time <i>8/12/04 0400</i></td> <td colspan="6"></td> </tr> <tr> <td>Reinquished By/Removed From</td> <td>Date/Time</td> <td>Received By/Stored In</td> <td>Date/Time</td> <td colspan="6"></td> </tr> <tr> <td>Reinquished By/Removed From</td> <td>Date/Time</td> <td>Received By/Stored In</td> <td>Date/Time</td> <td colspan="6"></td> </tr> </table>										Reinquished By/Removed From <i>Karen W</i>	Date/Time <i>1/21/04 0800</i>	Received By/Stored In <i>517 FC16 1/21/04</i>	Date/Time <i>1/21/04</i>	SPECIAL INSTRUCTIONS						Reinquished By/Removed From <i>Site Edge 8/14/04</i>	Date/Time <i>0800</i>	Received By/Stored In <i>517 FC16 8/14/04</i>	Date/Time <i>0800</i>	** The laboratory is to report both kerosene and diesel range compounds from the WTPH-D analysis. 6010B Supertrace AT 8/11/2004						Reinquished By/Removed From <i>Greg Thomas Greg Thomas 8/14/04</i>	Date/Time <i>0800</i>	Received By/Stored In <i>FED EX</i>	Date/Time	(1) IC Anions - 300.0 (Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate); Total Cyanide - 90.0; pH (Soil) - 9045; Ammonia by 350.3 AT 8/11/2004 (2) ICP/MS - 200.4 (Cd-Mg); Cadmium, Chromium, Copper, Silver; 169445 - 200.0 (Add-on); H. carb., Mercury - 100.0; Ni + Cr(VI) (Mercury AT 8/11/2004) Mercury by 71.71 (3) VOA - 8260A (TCL); VOA - 8260A (Add-On) (1-Butanol, cis-1,2-Dichloroethylene, n-Butylbenzene, trans-1,2-Dichloroethylene) (4) Semi-VOA - 8270A (Add-On) (Tributyl phosphate); TPH-Gasoline Range - WTPH-G; TPH-Diesel Range - WTPH-D (Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range) (5) Gamma-Spectroscopy (Gadolinium-157, Cobalt-60, Europium-152, Europium-154, Europium-155, Isotopic Potassium, Isotopic Uranium, Americium-241, Strontium-89.00 - Total Br AT 8/11/04 (5) NO _x /NO _y - 353-23; Oil & Grease - 413.1; Chloroform NEX - 7190						Reinquished By/Removed From <i>FED EX</i>	Date/Time	Received By/Stored In <i>PLW (JW)</i>	Date/Time <i>8/12/04 0400</i>							Reinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time							Reinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time						
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Reinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time																																																																		
LABORATORY SECTION	Title								Date/Time																																																												
FINAL SAMPLE DISPOSITION	Disposed By								Date/Time																																																												

A-8003-818(03/03)

*=Soil
 SE=Solid
 SO=Solid
 S=Sludge
 W=Water
 O=Oil
 A=Air
 DS=Dust Solids
 DL=Dust Liquids
 T=Tissue
 W=Water
 L=Liquid
 V=Vigorous
 X=Outer

STL ST. LOUIS

N
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Lot No: F4H120314

Condition Upon Receipt Form
St. Louis Laboratory

Client: FLUOK Hanford Inc.
Quote No: 56414
Shipper/No: 8417 7884 3920

Date: 8/12/04 Time: 0900
Initiated by: MW
COC/RFA Numbers: F04 - 015 - 003

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="checkbox"/> N	Sample received in undamaged condition?	7. <input checked="" type="checkbox"/> N	Sample received with Chain of Custody?
2. <input checked="" type="checkbox"/> N	Sample received within 4C ± 2C? Record <u>46</u>	8. <input checked="" type="checkbox"/> N	Chain of Custody matches sample IDs on containers?
3. <input checked="" type="checkbox"/> N N/A	Sample received with proper pH ?	9. <input checked="" type="checkbox"/> Y N N/A	Custody seal received intact on cooler.?
4. <input checked="" type="checkbox"/> N	If N/A - Was pH taken by original STL lab?	10. <input checked="" type="checkbox"/> Y N N/A	Custody seal tamper evident on cooler.?
5. <input checked="" type="checkbox"/> N	Sample received in proper containers?	12. <input checked="" type="checkbox"/> Y N N/A	Custody seal on bottles received intact?
6. <input checked="" type="checkbox"/> N	Sample volume sufficient for analysis?	13. <input checked="" type="checkbox"/> Y N	Was CUR (equivalent) rec'd from original STL lab?

* Temperature Variance Does Not Affect the Following Analyses:

'For DOE-AL (Pintex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes:

Bottle for item 5 has a different sample i.d. B197FO. 7.21.04 1034. Place collected is the same as the other gds. Logged as B195W2

SV 8.12.04

Corrective Action:

- Client's Name: _____ Informed by: _____ By: _____
 Sample(s) processed "as is". _____
 Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: MWB Date: 8-13-04

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR
INITIALS AND THE DATE NEXT TO THAT ITEM

2472

ADMIN-004, Revised 2/17/04
\\SLAY01\QA\FORMS\ST-Louis\ADMIN\Admin004 rev7.doc

STL ST. LOUIS

VOLATILE ORGANICS

STL ST. LOUIS

FLUOR HANFORD IC

Client Sample ID: B195W2

GC/MS Volatiles

Lot-Sample #...: F4H120314-001 Work Order #...: GM17P1A7 Matrix.....: SOLID
Date Sampled...: 07/21/04 Date Received...: 08/12/04
Prep Date.....: 08/18/04 Analysis Date...: 08/18/04
Prep Batch #:...: 4232079
Dilution Factor: 1
% Moisture.....: 7.3

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
n-Butylbenzene	ND	5.4	ug/kg	0.81
1-Butanol	ND	54	ug/kg	36
cis-1,2-Dichloroethene	ND	5.4	ug/kg	0.22
trans-1,2-Dichloroethene	ND	5.4	ug/kg	0.33
Chloromethane	ND	11	ug/kg	0.25
Vinyl chloride	ND	5.4	ug/kg	0.69
Bromomethane	ND	11	ug/kg	0.96
Chloroethane	ND	11	ug/kg	0.60
Acetone	11 J,B	22	ug/kg	1.4
1,1-Dichloroethene	ND	5.4	ug/kg	0.73
Methylene chloride	11	5.4	ug/kg	2.8
Carbon disulfide	ND	5.4	ug/kg	0.29
1,1-Dichloroethane	ND	5.4	ug/kg	0.23
2-Butanone	ND	22	ug/kg	1.2
1,2-Dichloroethene (total)	ND	11	ug/kg	0.66
Chloroform	ND	5.4	ug/kg	0.13
1,1,1-Trichloroethane	ND	5.4	ug/kg	0.12
Carbon tetrachloride	ND	5.4	ug/kg	0.15
1,2-Dichloroethane	ND	5.4	ug/kg	0.15
Benzene	ND	5.4	ug/kg	0.12
Trichloroethene	ND	5.4	ug/kg	0.065
1,2-Dichloropropane	ND	5.4	ug/kg	0.11
Bromodichloromethane	ND	5.4	ug/kg	0.076
4-Methyl-2-pentanone	ND	22	ug/kg	0.97
cis-1,3-Dichloropropene	ND	5.4	ug/kg	0.16
Toluene	ND	5.4	ug/kg	0.64
trans-1,3-Dichloropropene	ND	5.4	ug/kg	0.57
1,1,2-Trichloroethane	ND	5.4	ug/kg	0.83
2-Hexanone	ND	22	ug/kg	1.4
Tetrachloroethene	ND	5.4	ug/kg	0.22
Dibromochloromethane	ND	5.4	ug/kg	0.64
Chlorobenzene	ND	5.4	ug/kg	0.13
Ethylbenzene	ND	5.4	ug/kg	0.41
Xylenes (total)	ND	5.4	ug/kg	0.88
Styrene	0.41 J	5.4	ug/kg	0.22
Bromoform	ND	5.4	ug/kg	0.67
1,1,2,2-Tetrachloroethane	ND	5.4	ug/kg	0.79

(Continued on next page)

STL ST. LOUIS

FLUOR HANFORD IC

Client Sample ID: B195W2

GC/MS Volatiles

Lot-Sample #....: F4H120314-001 Work Order #....: GM17P1A7 Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Toluene-d8	100	(80 - 130)
Dibromofluoromethane	97	(78 - 130)
1,2-Dichloroethane-d4	99	(72 - 134)
4-Bromofluorobenzene	104	(68 - 150)

NOTE(s) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL ST. LOUIS

FLUOR HANFORD IC

B195W2

GC/MS Volatiles

Lot-Sample #: F4H120314-001 Work Order #: GM17P1A7 Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/kg

STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F4H120314 Work Order #...: GM17P1C5-MS Matrix.....: SOLID
 MS Lot-Sample #: F4H120314-001 GM17P1C6-MSD
 Date Sampled...: 07/21/04 Date Received...: 08/12/04
 Prep Date.....: 08/18/04 Analysis Date...: 08/18/04
 Prep Batch #...: 4232079
 Dilution Factor: 1 % Moisture....: 7.3

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RSCVRY	RPD	METHOD
n-Butylbenzene	ND	53.7	52.8	ug/kg	98		SW846 8260B
	ND	53.6	55.7	ug/kg	104	5.2	SW846 8260B
cis-1,2-Dichloroethene	ND	53.7	68.5	ug/kg	128		SW846 8260B
	ND	53.6	53.9	ug/kg	101	24	SW846 8260B
trans-1,2-Dichloroethene	ND	53.7	69.7	ug/kg	130 a		SW846 8260B
	ND	53.6	52.8	ug/kg	99	28	SW846 8260B
Chloromethane	ND	53.7	51.0	ug/kg	95		SW846 8260B
	ND	53.6	39.3	ug/kg	73	26	SW846 8260B
Vinyl chloride	ND	53.7	60.2	ug/kg	112		SW846 8260B
	ND	53.6	44.3	ug/kg	83	30	SW846 8260B
Bromomethane	ND	53.7	51.8	ug/kg	96		SW846 8260B
	ND	53.6	37.4	ug/kg	70 p	32	SW846 8260B
Chloroethane	ND	53.7	68.0	ug/kg	127		SW846 8260B
	ND	53.6	52.6	ug/kg	98	26	SW846 8260B
Acetone	11	53.7	66.1	ug/kg	102		SW846 8260B
	11	53.6	53.7	ug/kg	79	21	SW846 8260B
1,1-Dichloroethene	ND	53.7	67.0	ug/kg	125		SW846 8260B
	ND	53.6	51.9	ug/kg	97	25	SW846 8260B
Methylene chloride	11	53.7	72.2	ug/kg	113		SW846 8260B
	11	53.6	54.0	ug/kg	79	29	SW846 8260B
Carbon disulfide	ND	53.7	72.8	ug/kg	135		SW846 8260B
	ND	53.6	57.4	ug/kg	107	24	SW846 8260B
1,1-Dichloroethane	ND	53.7	66.9	ug/kg	125		SW846 8260B
	ND	53.6	53.3	ug/kg	99	23	SW846 8260B
2-Butanone	ND	53.7	65.5	ug/kg	122		SW846 8260B
	ND	53.6	53.4	ug/kg	100	20	SW846 8260B
1,2-Dichloroethene (total)	ND	107	138	ug/kg	129 a		SW846 8260B
	ND	107	107	ug/kg	100	26	SW846 8260B
Chloroform	ND	53.7	67.6	ug/kg	126		SW846 8260B
	ND	53.6	53.3	ug/kg	99	24	SW846 8260B
1,1,1-Trichloroethane	ND	53.7	63.4	ug/kg	118		SW846 8260B
	ND	53.6	55.6	ug/kg	104	13	SW846 8260B
Carbon tetrachloride	ND	53.7	53.2	ug/kg	99		SW846 8260B
	ND	53.6	54.9	ug/kg	102	3.2	SW846 8260B
1,2-Dichloroethane	ND	53.7	51.1	ug/kg	95		SW846 8260B
	ND	53.6	55.9	ug/kg	104	9.0	SW846 8260B
Benzene	ND	53.7	50.0	ug/kg	93		SW846 8260B
	ND	53.6	51.8	ug/kg	97	3.4	SW846 8260B

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STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F4H120314 Work Order #...: GM17P1C5-MS Matrix.....: SOLID
 MS Lot-Sample #: F4H120314-001 GM17P1C6-MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		
	AMOUNT	AMT	AMOUNT		RECVRY	PPD	METHOD
Trichloroethene	ND	53.7	50.5	ug/kg	94		SW846 8260B
	ND	53.6	38.2	ug/kg	71	28	SW846 8260B
1,2-Dichloropropane	ND	53.7	47.6	ug/kg	89		SW846 8260B
	ND	53.6	39.5	ug/kg	74	19	SW846 8260B
Bromodichloromethane	ND	53.7	51.3	ug/kg	96		SW846 8260B
	ND	53.6	41.3	ug/kg	77	22	SW846 8260B
4-Methyl-2-pentanone	ND	53.7	45.6	ug/kg	85		SW846 8260B
	ND	53.6	39.8	ug/kg	74	14	SW846 8260B
cis-1,3-Dichloropropene	ND	53.7	52.2	ug/kg	97		SW846 8260B
	ND	53.6	42.7	ug/kg	80	20	SW846 8260B
Toluene	ND	53.7	54.3	ug/kg	101		SW846 8260B
	ND	53.6	58.5	ug/kg	109	7.5	SW846 8260B
trans-1,3-Dichloropropene	ND	53.7	59.3	ug/kg	110		SW846 8260B
	ND	53.6	66.4	ug/kg	124	11	SW846 8260B
1,1,2-Trichloroethane	ND	53.7	51.9	ug/kg	97		SW846 8260B
	ND	53.6	57.5	ug/kg	107	10	SW846 8260B
2-Hexanone	ND	53.7	54.5	ug/kg	102		SW846 8260B
	ND	53.6	64.1	ug/kg	119	16	SW846 8260B
Tetrachloroethene	ND	53.7	42.3	ug/kg	79		SW846 8260B
	ND	53.6	44.7	ug/kg	83	5.7	SW846 8260B
Dibromochloromethane	ND	53.7	52.7	ug/kg	98		SW846 8260B
	ND	53.6	54.5	ug/kg	102	3.4	SW846 8260B
Chlorobenzene	ND	53.7	52.0	ug/kg	97		SW846 8260B
	ND	53.6	56.4	ug/kg	105	8.2	SW846 8260B
Ethylbenzene	ND	53.7	52.9	ug/kg	98		SW846 8260B
	ND	53.6	57.0	ug/kg	106	7.5	SW846 8260B
Styrene	0.41	53.7	52.6	ug/kg	97		SW846 8260B
	0.41	53.6	56.5	ug/kg	105	7.2	SW846 8260B
Bromoform	ND	53.7	48.8	ug/kg	91		SW846 8260B
	ND	53.6	53.9	ug/kg	101	9.9	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	53.7	49.3	ug/kg	92		SW846 8260B
	ND	53.6	54.7	ug/kg	102	10	SW846 8260B
m-Xylene & p-Xylene	ND	107	104	ug/kg	97		SW846 8260B
	ND	107	114	ug/kg	106	8.9	SW846 8260B
c-Xylene	ND	53.7	53.3	ug/kg	99		SW846 8260B
	ND	53.6	56.5	ug/kg	105	5.9	SW846 8260B
1,3-Dichlorobenzene	ND	53.7	51.5	ug/kg	96		SW846 8260B
	ND	53.6	54.4	ug/kg	102	5.6	SW846 8260B
1,4-Dichlorobenzene	ND	53.7	49.1	ug/kg	91		SW846 8260B
	ND	53.6	54.9	ug/kg	102	11	SW846 8260B
1,2-Dichlorobenzene	ND	53.7	51.5	ug/kg	96		SW846 8260B
	ND	53.6	56.1	ug/kg	105	8.5	SW846 8260B

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STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F4H120314 Work Order #...: GM17P1C5-MS Matrix.....: SOLID
 MS Lot-Sample #: F4H120314-001 GM17P1C6-MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	METHOD
Bromobenzene	ND	53.7	53.3	ug/kg	99		SW846 8260B
	ND	53.6	53.3	ug/kg	99	0.08	SW846 8260B
Bromoform	ND	53.7	63.5	ug/kg	118		SW846 8260B
	ND	53.6	51.8	ug/kg	97	20	SW846 8260B
sec-Butylbenzene	ND	53.7	50.3	ug/kg	94		SW846 8260B
	ND	53.6	54.1	ug/kg	101	7.2	SW846 8260B
tert-Butylbenzene	ND	53.7	46.9	ug/kg	87		SW846 8260B
	ND	53.6	49.4	ug/kg	92	5.3	SW846 8260B
Allyl chloride	ND	53.7	76.1	ug/kg	142 a		SW846 8260B
	ND	53.6	60.5	ug/kg	113	23	SW846 8260B
2-Chlorotoluene	ND	53.7	54.5	ug/kg	101		SW846 8260B
	ND	53.6	58.2	ug/kg	109	6.6	SW846 8260B
4-Chlorotoluene	ND	53.7	50.3	ug/kg	94		SW846 8260B
	ND	53.6	53.7	ug/kg	100	6.6	SW846 8260B
Cyclohexanone	ND	53.7	662	ug/kg	123		SW846 8260B
	ND	53.6	740	ug/kg	138	11	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	53.7	51.9	ug/kg	97		SW846 8260B
	ND	53.6	59.5	ug/kg	111	14	SW846 8260B
1,2-Dibromoethane (EDB)	ND	53.7	51.0	ug/kg	95		SW846 8260B
	ND	53.6	54.5	ug/kg	102	6.7	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	53.7	54.3	ug/kg	101		SW846 8260B
	ND	53.6	58.1	ug/kg	108	6.7	SW846 8260B
Dichlorodifluoromethane (Freon 12)	ND	53.7	43.1	ug/kg	80		SW846 8260B
	ND	53.6	32.2	ug/kg	60	29	SW846 8260B
1,3-Dichloropropene	ND	53.7	51.6	ug/kg	96		SW846 8260B
	ND	53.6	58.6	ug/kg	109	13	SW846 8260B
2,2-Dichloropropene	ND	53.7	68.4	ug/kg	127 a		SW846 8260B
	ND	53.6	55.2	ug/kg	103	21	SW846 8260B
1,1-Dichloropropene	ND	53.7	53.8	ug/kg	100		SW846 8260B
	ND	53.6	57.5	ug/kg	107	6.7	SW846 8260B
Ethyl ether	ND	53.7	58.1	ug/kg	108		SW846 8260B
	ND	53.6	46.2	ug/kg	86	23	SW846 8260B
Ethyl methacrylate	ND	53.7	53.2	ug/kg	99		SW846 8260B
	ND	53.6	59.5	ug/kg	111	11	SW846 8260B
Freon 113	ND	53.7	69.2	ug/kg	129		SW846 8260B
	ND	53.6	53.8	ug/kg	100	25	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: F4H120314 Work Order #....: GM17PLC5-MS Matrix.....: SOLID
 MS Lot-Sample #: F4H120314-001 GM17PLC6-MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	METHOD
Hexachlorobutadiene	ND	53.7	45.8	ug/kg	85		SW846 8260B
	ND	53.6	45.5	ug/kg	85	0.78	SW846 8260B
n-Hexane	ND	53.7	59.1	ug/kg	110		SW846 8260B
	ND	53.6	47.0	ug/kg	88	23	SW846 8260B
Isopropylbenzene	ND	53.7	59.0	ug/kg	110		SW846 8260B
	ND	53.6	62.6	ug/kg	117	6.0	SW846 8260B
4-Isopropyltoluene	ND	53.7	55.4	ug/kg	103		SW846 8260B
	ND	53.6	59.3	ug/kg	111	6.8	SW846 8260B
Methyl methacrylate	ND	53.7	53.7	ug/kg	100		SW846 8260B
	ND	53.6	42.6	ug/kg	79	23	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	53.7	67.7	ug/kg	126		SW846 8260B
	ND	53.6	54.8	ug/kg	102	21	SW846 8260B
Naphthalene	ND	53.7	44.1	ug/kg	82		SW846 8260B
	ND	53.6	49.4	ug/kg	92	11	SW846 8260B
n-Propylbenzene	ND	53.7	55.3	ug/kg	103		SW846 8260B
	ND	53.6	60.5	ug/kg	113	8.9	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	53.7	52.9	ug/kg	98		SW846 8260B
	ND	53.6	54.9	ug/kg	102	3.7	SW846 8260B
Tetrahydrofuran	ND	53.7	57.9	ug/kg	108		SW846 8260B
	ND	53.6	52.9	ug/kg	99	9.1	SW846 8260B
1,2,3-Trichlorobenzene	ND	53.7	46.5	ug/kg	87		SW846 8260B
	ND	53.6	46.8	ug/kg	87	0.62	SW846 8260B
1,2,4-Trichloro- benzene	ND	53.7	48.5	ug/kg	90		SW846 8260B
	ND	53.6	50.3	ug/kg	94	3.6	SW846 8260B
Trichlorofluoromethane	ND	53.7	66.9	ug/kg	125		SW846 8260B
	ND	53.6	51.6	ug/kg	96	26	SW846 8260B
1,3,5-Trimethylbenzene	ND	53.7	53.7	ug/kg	100		SW846 8260B
	ND	53.6	58.1	ug/kg	108	8.0	SW846 8260B

SURROGATE	PERCENT		RECOVERY LIMITS
	RECOVERY		
Toluene-d8	108		(80 - 130)
	109		(80 - 130)
Dibromofluoromethane	134 *		(78 - 130)
	99		(78 - 130)
1,2-Dichloroethane-d4	103		(72 - 134)
	99		(72 - 134)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: F4H120314 Work Order #: GM17P1C5-MS Matrix.....: SOLID
MS Lot-Sample #: F4H120314-001 GM17P1C6-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	105	(68 - 150)
	116	(68 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

p Relative percent difference (RPD) is outside stated control limits.

s Spiked analysis recovery is outside stated control limits.

***** Surrogate recovery is outside stated control limits.

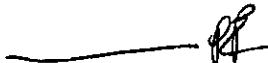
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SEMI-VOLATILE ORGANICS

LOT # F4H120314

W04150

17



FLUOR HAMPTON IC

Client Sample ID: B195W2

GC/MS Semivolatiles

Lot-Sample #....: F4H120314-001 Work Order #....: GM17P1A4 Matrix.....: SOLID
 Date Sampled...: 07/21/04 Date Received...: 08/12/04
 Prep Date.....: 08/14/04 Analysis Date...: 08/18/04
 Prep Batch #...: 4227121
 Dilution Factor: 1
 % Moisture.....: 7.3 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Phenol	ND	360	ug/kg	94
2-Chlorophenol	ND	360	ug/kg	15
N-Nitrosodi-n-propyl-amine	ND	360	ug/kg	21
1,2,4-Trichlorobenzene	ND	360	ug/kg	19
4-Chloro-3-methylphenol	ND	360	ug/kg	29
Acenaphthene	ND	360	ug/kg	18
4-Nitrophenol	ND	1700	ug/kg	46
2,4-Dinitrotoluene	ND	360	ug/kg	19
Diethyl phthalate	ND	360	ug/kg	44
Pentachlorophenol	ND	1700	ug/kg	130
Di-n-butyl phthalate	ND	360	ug/kg	30
Pyrene	ND	360	ug/kg	24
Tributyl phosphate	ND	360	ug/kg	360
1,4-Dichlorobenzene	ND	360	ug/kg	15

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
		(40 - 103)	(36 - 105)
2-Fluorophenol	70	(45 - 114)	(49 - 120)
Phenol-d5	67	(39 - 114)	(42 - 108)
Nitrobenzene-d5	76		
2-Fluorobiphenyl	80		
2,4,6-Tribromophenol	79		
Terphenyl-d14	88		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

REVISED
 7/19/05

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 18

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F4H120314 Work Order #...: GMG1E1CP-MS Matrix.....: SOLID
MS Lot-Sample #: F4H040341-004 GMG1E1CQ-MSD
Date Sampled...: 08/02/04 Date Received...: 08/04/04
Prep Date.....: 08/14/04 Analysis Date...: 08/19/04
Prep Batch #...: 4227121
Dilution Factor: 1 % Moisture....: 12

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT		
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD
Phenol	ND	3790	2960	ug/kg	78	
	ND	3780	3040	ug/kg	80	2.6
bis(2-Chloroethyl)-ether	ND	3790	2980	ug/kg	79	
	ND	3780	3070	ug/kg	81	2.7
2-Chlorophenol	ND	3790	2930	ug/kg	77	
	ND	3780	3020	ug/kg	80	3.0
2-Methylphenol	ND	3790	2890	ug/kg	76	
	ND	3780	2940	ug/kg	78	1.7
2,2'-oxybis(1-Chloropropane)	ND	3790	3010	ug/kg	79	
	ND	3780	3090	ug/kg	82	2.8
3-Methylphenol & 4-Methylphenol	ND	3790	2980	ug/kg	79	
	ND	3780	3030	ug/kg	80	1.9
N-Nitrosodi-n-propyl-amine	ND	3790	3400	ug/kg	90	
	ND	3780	3470	ug/kg	92	2.0
Hexachloroethane	ND	3790	2920	ug/kg	77	
	ND	3780	3010	ug/kg	79	2.9
Nitrobenzene	ND	3790	2160	ug/kg	57	
	ND	3780	2110	ug/kg	56	2.4
Iophorone	ND	3790	3260	ug/kg	86	
	ND	3780	3330	ug/kg	88	2.0
2-Nitrophenol	ND	3790	3160	ug/kg	84	
	ND	3780	3250	ug/kg	86	2.6
2,4-Dimethylphenol	ND	3790	3020	ug/kg	80	
	ND	3780	3160	ug/kg	83	4.4
bis(2-Chloroethoxy) methane	ND	3790	3200	ug/kg	84	
	ND	3780	3240	ug/kg	86	1.3
2,4-Dichlorophenol	ND	3790	3070	ug/kg	81	
	ND	3780	3160	ug/kg	84	2.8
1,2,4-Trichlorobenzene	ND	3790	3120	ug/kg	82	
	ND	3780	3180	ug/kg	84	2.1

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F4H120314 Work Order #...: GMG1E1CP-MS Matrix.....: SOLID
MS Lot-Sample #: F4H040341-004 GMG1E1CQ-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Naphthalene	ND	3790	3140	ug/kg	83		SW846 8270C
	ND	3780	3220	ug/kg	85	2.5	SW846 8270C
4-Chloroaniline	ND	3790	2170	ug/kg	57		SW846 8270C
	ND	3780	2310	ug/kg	61	6.2	SW846 8270C
Hexachlorobutadiene	ND	3790	3070	ug/kg	81		SW846 8270C
	ND	3780	3150	ug/kg	83	2.5	SW846 8270C
4-Chloro-3-methylphenol	ND	3790	3100	ug/kg	82		SW846 8270C
	ND	3780	3350	ug/kg	88	7.5	SW846 8270C
2-Methylnaphthalene	ND	3790	3050	ug/kg	81		SW846 8270C
	ND	3780	3140	ug/kg	83	2.8	SW846 8270C
Hexachlorocyclopenta-diene	ND	3790	4270	ug/kg	113		SW846 8270C
	ND	3780	4230	ug/kg	112	0.77	SW846 8270C
2,4,6-Trichlorophenol	ND	3790	3150	ug/kg	83		SW846 8270C
	ND	3780	3360	ug/kg	89	6.7	SW846 8270C
2,4,5-Trichlorophenol	ND	3790	3200	ug/kg	84		SW846 8270C
	ND	3780	3500	ug/kg	92	8.9	SW846 8270C
2-Nitroaniline	ND	3790	3290	ug/kg	87		SW846 8270C
	ND	3780	3630	ug/kg	96	9.8	SW846 8270C
Dimethyl phthalate	ND	3790	3310	ug/kg	87		SW846 8270C
	ND	3780	3610	ug/kg	95	8.6	SW846 8270C
Acenaphthylene	ND	3790	3400	ug/kg	90		SW846 8270C
	ND	3780	3580	ug/kg	95	5.0	SW846 8270C
2,6-Dinitrotoluene	ND	3790	3410	ug/kg	90		SW846 8270C
	ND	3780	3740	ug/kg	99	9.2	SW846 8270C
3-Nitroaniline	ND	3790	2440	ug/kg	64		SW846 8270C
	ND	3780	2880	ug/kg	76	17	SW846 8270C
Acenaphthene	ND	3790	3220	ug/kg	85		SW846 8270C
	ND	3780	3400	ug/kg	90	5.2	SW846 8270C
2,4-Dinitrophenol	ND	3790	2950	ug/kg	78		SW846 8270C
	ND	3780	3270	ug/kg	86	10	SW846 8270C
4-Nitrophenol	ND	3790	3150	ug/kg	83		SW846 8270C
	ND	3780	3610	ug/kg	95	14	SW846 8270C
Dibenzofuran	ND	3790	3090	ug/kg	82		SW846 8270C
	ND	3780	3290	ug/kg	87	6.3	SW846 8270C
2,4-Dinitrotoluene	ND	3790	3530	ug/kg	93		SW846 8270C
	ND	3780	3910	ug/kg	103	10	SW846 8270C

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STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #: F4H120314 Work Order #: GMG1E1CP-MS Matrix.....: SOLID
MS Lot-Sample #: F4H040341-004 GMG1E1CQ-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Diethyl phthalate	ND	3790	3360	ug/kg	89		SW846 8270C
	ND	3780	3680	ug/kg	97	9.2	SW846 8270C
4-Chlorophenyl phenyl ether	ND	3790	3220	ug/kg	85		SW846 8270C
	ND	3780	3450	ug/kg	91	7.0	SW846 8270C
Fluorene	ND	3790	3300	ug/kg	87		SW846 8270C
	ND	3780	3570	ug/kg	94	7.8	SW846 8270C
4-Nitroaniline	ND	3790	3080	ug/kg	81		SW846 8270C
	ND	3780	3510	ug/kg	93	13	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	3790	3310	ug/kg	87		SW846 8270C
	ND	3780	3510	ug/kg	93	5.7	SW846 8270C
N-Nitrosodiphenylamine	ND	3790	3580	ug/kg	95		SW846 8270C
	ND	3780	3830	ug/kg	101	6.8	SW846 8270C
4-Bromophenyl phenyl ether	ND	3790	3390	ug/kg	90		SW846 8270C
	ND	3780	3600	ug/kg	95	5.9	SW846 8270C
Hexachlorobenzene	ND	3790	3340	ug/kg	88		SW846 8270C
	ND	3780	3580	ug/kg	95	7.0	SW846 8270C
Pentachlorophenol	ND	3790	3320	ug/kg	88		SW846 8270C
	ND	3780	3610	ug/kg	95	8.4	SW846 8270C
Phenanthrene	ND	3790	3220	ug/kg	85		SW846 8270C
	ND	3780	3480	ug/kg	92	7.5	SW846 8270C
Anthracene	ND	3790	3340	ug/kg	88		SW846 8270C
	ND	3780	3580	ug/kg	95	7.2	SW846 8270C
Carbazole	ND	3790	3310	ug/kg	88		SW846 8270C
	ND	3780	3620	ug/kg	96	8.8	SW846 8270C
Di-n-butyl phthalate	ND	3790	3550	ug/kg	94		SW846 8270C
	ND	3780	3890	ug/kg	103	9.0	SW846 8270C
Fluoranthene	ND	3790	3370	ug/kg	89		SW846 8270C
	ND	3780	3720	ug/kg	98	9.9	SW846 8270C
Pyrene	ND	3790	3610	ug/kg	95		SW846 8270C
	ND	3780	3780	ug/kg	100	4.5	SW846 8270C
Butyl benzyl phthalate	ND	3790	3720	ug/kg	98		SW846 8270C
	ND	3780	3920	ug/kg	104	5.1	SW846 8270C
3,3'-Dichlorobenzidine	ND	3790	2620	ug/kg	69		SW846 8270C
	ND	3780	2920	ug/kg	77	11	SW846 8270C
Benzo(a)anthracene	ND	3790	3590	ug/kg	95		SW846 8270C
	ND	3780	3890	ug/kg	103	8.2	SW846 8270C

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #: F4H120314 Work Order #: GMG1E1CP-MS Matrix.....: SOLID
MS Lot-Sample #: F4H040341-004 GMG1E1CQ-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Chrysene	ND	3790	3700	ug/kg	98		SW846 8270C
	ND	3780	4020	ug/kg	106	8.1	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	3790	3860	ug/kg	102		SW846 8270C
	ND	3780	4110	ug/kg	109	6.4	SW846 8270C
Di-n-octyl phthalate	ND	3790	4380	ug/kg	116		SW846 8270C
	ND	3780	4510	ug/kg	119	3.0	SW846 8270C
Benzo (b) fluoranthene	ND	3790	4390	ug/kg	116		SW846 8270C
	ND	3780	4720	ug/kg	125 a	7.1	SW846 8270C
Benzo (k) fluoranthene	ND	3790	4350	ug/kg	115		SW846 8270C
	ND	3780	4590	ug/kg	121	5.4	SW846 8270C
Benzo (a) pyrene	ND	3790	4360	ug/kg	115 a		SW846 8270C
	ND	3780	4680	ug/kg	124 a	7.0	SW846 8270C
Indeno(1,2,3-cd) pyrene	ND	3790	4670	ug/kg	123		SW846 8270C
	ND	3780	5180	ug/kg	137 a	10	SW846 8270C
Dibenz (a,h) anthracene	ND	3790	4550	ug/kg	120		SW846 8270C
	ND	3780	5080	ug/kg	134 a	11	SW846 8270C
Benzo (ghi) perylene	ND	3790	4420	ug/kg	117		SW846 8270C
	ND	3780	4920	ug/kg	130	11	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(40 - 103)
	81	(40 - 103)
Phenol-d5	83	(36 - 105)
	82	(36 - 105)
Nitrobenzene-d5	87	(45 - 114)
	86	(45 - 114)
2-Fluorobiphenyl	90	(49 - 120)
	89	(49 - 120)
2,4,6-Tribromophanol	90	(39 - 114)
	95	(39 - 114)
Terphenyl-d14	91	(42 - 108)
	91	(42 - 108)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analysis recovery is outside stated control limits.

STL ST. LOUIS

FLOOR HAMFORD IC

Client Sample ID: B195W2

GC Volatiles

Lot-Sample #....: F4H120314-001 Work Order #....: GM17P1A6 Matrix.....: SOLID
Date Sampled...: 07/21/04 Date Received...: 08/12/04
Prep Date.....: 09/07/04 Analysis Date...: 09/07/04
Prep Batch #....: 4252070
Dilution Factor: 1
% Moisture.....: 7.3 Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	0.029
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Trifluorotoluene	61	(28 - 124)		

STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: F4H120314 Work Order #...: GM17P1C3-MS Matrix.....: SOLID
MS Lot-Sample #: F4H120314-001 GM17P1C4-MSD
Date Sampled...: 07/21/04 Date Received...: 08/12/04
Prep Date.....: 09/07/04 Analysis Date...: 09/07/04
Prep Batch #...: 4252070
Dilution Factor: 1 % Moisture.....: 7.3

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Volatile Petroleum Hydrocarbons	ND	1.00	0.710	mg/kg	71		SW846 8015 MOD
	ND	1.00	0.697	mg/kg	70	1.9	SW846 8015 MOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Trifluorotoluene	94	(28 - 124)
	91	(28 - 124)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

STL ST. LOUIS

FLUOR HAMFORD IC

Client Sample ID: B195W2

GC Semivolatiles

Lot-Sample #....: F4H120314-001 Work Order #....: GM17P1A5 Matrix.....: SOLID
Date Sampled....: 07/21/04 Date Received...: 08/12/04
Prep Date.....: 08/13/04 Analysis Date...: 08/18/04
Prep Batch #....: 4226332
Dilution Factor: 1
% Moisture.....: 7.3 Method.....: SW846 8015 MOD

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Kerosene	ND	27	mg/kg	27
TPH - Diesel Range - WTPH-D	ND	27	mg/kg	2.0
SURROGATE	32	RECOVERY		
		PERCENT	LIMITS	(10 - 150)
o-Terphenyl				

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: F4H120314 Work Order #...: GM17P1C1-MS Matrix.....: SOLID
MS Lot-Sample #: F4H120314-001 GM17P1C2-MSD
Date Sampled...: 07/21/04 Date Received...: 08/12/04
Prep Date.....: 08/13/04 Analysis Date...: 08/18/04
Prep Batch #...: 4226332
Dilution Factor: 1 % Moisture.....: 7.3

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
TPH - Diesel Range - WTPH	ND	89.6	52.2	mg/kg	58	12	SW846 8015 MOD
	ND	89.8	46.2	mg/kg	51	12	SW846 8015 MOD

SURROGATE	PERCENT		RECOVERY	
	RECOVERY	LIMITS	(10 - 150)	(10 - 150)
o-Terphenyl	46	45		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

STL ST. LOUIS

FLUOR HANFORD IC

Client Sample ID: B195W2

GC Semivolatiles

Lot-Sample #....: F4H120314-001 Work Order #....: GM17P1C9 Matrix.....: SOLID
Date Sampled...: 07/21/04 Date Received..: 08/12/04
Prep Date.....: 08/14/04 Analysis Date...: 08/17/04
Prep Batch #....: 4227118
Dilution Factor: 1
% Moisture.....: 7.3

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Aroclor 1016	ND	36	ug/kg	6.9
Aroclor 1221	ND	36	ug/kg	7.6
Aroclor 1232	ND	36	ug/kg	8.7
Aroclor 1242	ND	36	ug/kg	8.1
Aroclor 1248	ND	36	ug/kg	10
Aroclor 1254	56	36	ug/kg	8.5
Aroclor 1260	47	36	ug/kg	8.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
		(10 - 150)	
Decachlorobiphenyl	117		

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: F4H120314 Work Order #: GM17P1DA-MS Matrix.....: SOLID
MS Lot-Sample #: F4H120314-001 GM17P1DC-MSD
Date Sampled...: 07/21/04 Date Received...: 08/12/04
Prep Date.....: 08/14/04 Analysis Date...: 08/17/04
Prep Batch #:...: 4227118
Dilution Factor: 1 % Moisture.....: 7.3

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT	METHOD		
	AMOUNT	AMT	AMOUNT	UNITS		RECVRY	RPD
Aroclor 1016	ND	179	179	ug/kg	100		SW846 8082
	ND	179	179	ug/kg	100	0.30	SW846 8082
Aroclor 1260	47	179	214	ug/kg	93		SW846 8082
	47	179	211	ug/kg	92	1.6	SW846 8082

SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY		
Decachlorobiphenyl	114		(10 - 150)
	112		(10 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

STL ST. LOUIS

FLUOR HANFORD IC

Client Sample ID: B195W2

TOTAL Metals

Lot-Sample #: F4H120314-001

Date Sampled...: 07/21/04

Date Received...: 08/12/04

% Moisture....: 7.3

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4226071						
Antimony	0.66 B	1.1	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AM
		Dilution Factor: 1		MDL.....: 0.22		
Arsenic	2.3	1.1	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AP
		Dilution Factor: 1		MDL.....: 0.19		
Barium	68.3 J	21.6	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AQ
		Dilution Factor: 1		MDL.....: 0.047		
Beryllium	0.20 B	0.54	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AR
		Dilution Factor: 1		MDL.....: 0.041		
Cadmium	ND	0.54	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AT
		Dilution Factor: 1		MDL.....: 0.024		
Chromium	13.5	1.1	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AU
		Dilution Factor: 1		MDL.....: 0.61		
Copper	15.0	2.7	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AV
		Dilution Factor: 1		MDL.....: 0.40		
Lead	5.5	0.54	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AW
		Dilution Factor: 1		MDL.....: 0.22		
Nickel	8.7 J	4.3	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AX
		Dilution Factor: 1		MDL.....: 0.14		
Selenium	ND	0.54	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1AO
		Dilution Factor: 1		MDL.....: 0.32		
Silver	2.2	1.1	mg/kg	SW846 6010B	08/13-08/20/04	GM17P1A1
		Dilution Factor: 1		MDL.....: 0.63		
Bismuth	144	21.6	mg/kg	SW846 6010B	08/13-08/23/04	GM17P1A2
		Dilution Factor: 1		MDL.....: 2.2		
Boron	6.5 B,J	21.6	mg/kg	SW846 6010B	08/13-08/23/04	GM17P1A3
		Dilution Factor: 1		MDL.....: 0.61		
Prep Batch #...: 4230117						
Mercury	0.92	0.036	mg/kg	SW846 7471A	08/17/04	GM17P1AM
		Dilution Factor: 1		MDL.....: 0.018		

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FLUOR HANFORD IC

Client Sample ID: B195W2

TOTAL Metals

Lot-Sample #....: F4H120314-001

Matrix.....: SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL ST. LOUIS

FLUOR HANFORD IC

Client Sample ID: B195W2

General Chemistry

Lot-Sample #: F4H120314-001 Work Order #: GM17P Matrix.....: SOLID
Date Sampled...: 07/21/04 Date Received.: 08/12/04
% Moisture....: 7.3

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Phosphate as P, Ortho	ND	50.0	mg/kg	MCAWW 300.0A	08/18-08/19/04	4233266
		Dilution Factor: 1		MDL.....: 0.50		
pH (solid)	9.2		No Units	SW846 9045A	08/16/04	4239405
		Dilution Factor: 1		MDL.....:		
Fluoride	ND	10.0	mg/kg	MCAWW 300.0A	08/18-08/19/04	4233263
		Dilution Factor: 1		MDL.....: 0.10		
Hexavalent Chromium	ND	0.43	mg/kg	SW846 7196A	08/20-08/23/04	4236221
		Dilution Factor: 1		MDL.....: 0.27		
Nitrate	1.9 B	2.0	mg/kg	MCAWW 300.0A	08/18-08/19/04	4233264
		Dilution Factor: 1		MDL.....: 0.040		
Nitrate/Nitrite as N	2.1	0.50	mg/kg	MCAWW 353.1	08/18/04	4233377
		Dilution Factor: 1		MDL.....: 0.036		
Nitrite	ND	2.0	mg/kg	MCAWW 300.0A	08/18-08/19/04	4233265
		Dilution Factor: 1		MDL.....: 0.040		
Nitrogen, as Ammonia	0.83	0.50	mg/kg	MCAWW 350.1	08/16/04	4230066
		Dilution Factor: 1		MDL.....: 0.22		
Oil and Grease (Gravimetric)	197 B	216	mg/kg	SW846 9071A	09/06-09/07/04	4251073
		Dilution Factor: 1		MDL.....:		
Percent Moisture	7.3	0.10	%	MCAWW 160.3 MOD	08/19-08/20/04	4232368
		Dilution Factor: 1		MDL.....:		
Sulfate	8.0 B	50.0	mg/kg	MCAWW 300.0A	08/18-08/19/04	4233267
		Dilution Factor: 1		MDL.....: 0.37		
Total Cyanide	ND	0.50	mg/kg	SW846 9010A	08/26/04	4239316
		Dilution Factor: 1		MDL.....: 0.13		

NOTE(S) :

RL: Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B: Estimated result. Result is less than RL.

STL ST. LOUIS

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: F4H120314 Work Order #....: GNF9N1AA Matrix.....: SOLID
MS Lot-Sample #: F4H190000-079
Prep Date.....: 08/18/04
Analysis Date..: 08/18/04 Prep Batch #: 4232079
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
cis-1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1-Butanol	ND	50	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Acetone	6.7 J	20	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B

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STL ST. LOUIS

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: F4H120314

Work Order #....: GNF9N1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
SURROGATE		PERCENT	RECOVERY	
Toluene-d8	101		(80 - 130)	
Dibromofluoromethane	96		(78 - 130)	
1,2-Dichloroethane-d4	105		(72 - 134)	
4-Bromofluorobenzene	100		(68 - 150)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

STL ST. LOUIS

FLUOR HANFORD IC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: F4H190000-079 B Work Order #: GNPF9N1AA Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/kg

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: F4H120314
 MB Lot-Sample #: F4H140000-121
 Analysis Date...: 08/17/04
 Dilution Factor: 1

Work Order #....: GM67V1AA

Matrix.....: SOLID

Prep Date.....: 08/14/04
 Prep Batch #: 4227121

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Phenol	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
Acenaphthene	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
Tributyl phosphate	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY
		<u>LIMITS</u>
2-Fluorophenol	82	(40 - 103)
Phenol-d5	78	(36 - 105)
Nitrobenzene-d5	86	(45 - 114)
2-Fluorobiphenyl	89	(49 - 120)
2,4,6-Tribromophenol	72	(39 - 114)
Terphenyl-d14	94	(42 - 108)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

REVISED
Weyer

7/19/05

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FLUOR HANFORD IC

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: F4H140000-121 B Work Order #: GM67V1AA Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED		RETENTION	
		RESULT	TIME	M	2.221
Unknown aldol condensate	4600				ug/kg

NOTE (S) :

M: Result was measured against nearest internal standard assuming a response factor of 1.

REVISED
R Dwyer

7/19/05

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STL ST. LOUIS

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: F4H120314 Work Order #....: GPQTA1AA Matrix.....: SOLID
NB Lot-Sample #: F4I080000-070
Analysis Date...: 09/07/04 Prep Date.....: 09/07/04
Dilution Factor: 1 Prep Batch #: 4252070

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Volatile Petroleum Hydrocarbons	ND	0.10	mg/kg	SW846 8015 MOD
SURROGATE	PERCENT	RECOVERY		LIMITS
	RECOVERY	(28 - 124)		
Trifluorotoluene	95			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: F4H120314 Work Order #....: GM4PK1AA Matrix.....: SOLID
MB Lot-Sample #: F4H130000-332
Prep Date.....: 08/13/04
Analysis Date..: 08/18/04 Prep Batch #....: 4226332
Dilution Factor: 1

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Kerosene	ND	25	mg/kg	SW846 8015 MOD
TPH - Diesel Range - WTPH	ND	25	mg/kg	SW846 8015 MOD
SURROGATE	PERCENT RECOVERY	RECOVERY		LIMITS
		(78 - 150)		
o-Terphenyl	65 *			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Surrogate recovery is outside stated control limits.

STL ST. LOUIS

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F4H120314
MB Lot-Sample #: F4H140000-118
Analysis Date..: 08/17/04
Dilution Factor: 1

Work Order #...: GM6611AA

Matrix.....: SOLID

Prep Date.....: 08/14/04
Prep Batch #: 4227118

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Decachlorobiphenyl	123	(10 - 150)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

METHOD BLANK REPORT

TOTAL Metals

Client Lot #: F4H120314

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F4H130000-071		Prep Batch #: 4226071				
Antimony	ND	1.0	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AA
		Dilution Factor: 1				
Arsenic	ND	1.0	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AC
		Dilution Factor: 1				
Barium	0.77 B	20.0	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AD
		Dilution Factor: 1				
Beryllium	ND	0.50	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AE
		Dilution Factor: 1				
Cadmium	ND	0.50	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AF
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AG
		Dilution Factor: 1				
Copper	ND	2.5	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AH
		Dilution Factor: 1				
Lead	ND	0.50	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AJ
		Dilution Factor: 1				
Nickel	0.20 B	4.0	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AK
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AL
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	08/13-08/20/04	GM2611AM
		Dilution Factor: 1				
Bismuth	ND	20.0	mg/kg	SW846 6010B	08/13-08/23/04	GM2611AN
		Dilution Factor: 1				
Boron	2.9 B	20.0	mg/kg	SW846 6010B	08/13-08/23/04	GM2611AP
		Dilution Factor: 1				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #: F4H120314

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
MB Lot-Sample #: F4H170000-117	Prep Batch #: 4230117					
Mercury	ND	0.033	mg/kg	SW846 7471A	08/17/04	GM9QG1AA
		Dilution Factor:	1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

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METHOD BLANK REPORT

General Chemistry

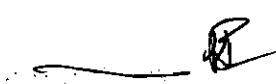
Client Lot #....: F4H120314

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
		LIMIT	UNITS				
Fluoride	ND	Work Order #: GNKOT1AA	MB Lot-Sample #:	MCAWW 300.0A	F4H200000-263	08/18/04	4233263
		10.0	mg/kg	Dilution Factor: 1			
Hexavalent Chromium		Work Order #: GNPAG1AA	MB Lot-Sample #:	SW846 7196A	F4H230000-221	08/20-08/23/04	4236221
	ND	0.40	mg/kg	Dilution Factor: 1			
Nitrate		Work Order #: GNKOW1AA	MB Lot-Sample #:	MCAWW 300.0A	F4H200000-264	08/18/04	4233264
	ND	2.0	mg/kg	Dilution Factor: 1			
Nitrate/Nitrite as N		Work Order #: GNNM11AA	MB Lot-Sample #:	MCAWW 353.1	F4H200000-377	08/18-08/21/04	4233377
	ND	0.50	mg/kg	Dilution Factor: 1			
Nitrite		Work Order #: GNK001AA	MB Lot-Sample #:	MCAWW 300.0A	F4H200000-265	08/18/04	4233265
	ND	2.0	mg/kg	Dilution Factor: 1			
Nitrogen, as Ammonia		Work Order #: GM9HA1AA	MB Lot-Sample #:	MCAWW 350.1	F4H170000-066	08/16/04	4230066
	ND	0.50	mg/kg	Dilution Factor: 1			
Oil and Grease (Gravimetric)		Work Order #: GRNWT1AA	MB Lot-Sample #:	SW846 9071A	F4I070000-073	09/06-09/07/04	4251073
	ND	200	mg/kg	Dilution Factor: 1			
Phosphate as P, Ortho		Work Order #: GNK021AA	MB Lot-Sample #:	MCAWW 300.0A	F4H200000-266	08/18/04	4233266
	ND	50.0	mg/kg	Dilution Factor: 1			
Sulfate		Work Order #: GNK051AA	MB Lot-Sample #:	MCAWW 300.0A	F4H200000-267	08/18/04	4233267
	ND	50.0	mg/kg	Dilution Factor: 1			
Total Cyanide		Work Order #: GN08D1AA	MB Lot-Sample #:	SW846 9010A	F4H260000-316	08/26/04	4239316
	ND	0.50	mg/kg	Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.



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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: F4H120314 Work Order #....: GNF9N1AC Matrix.....: SOLID
LCS Lot-Sample#: F4H190000-079
Prep Date.....: 08/18/04 Analysis Date...: 08/18/04
Prep Batch #....: 4232079
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
n-Butylbenzene	50.0	54.9	ug/kg	110	SW846 8260B
cis-1,2-Dichloroethene	50.0	52.2	ug/kg	104	SW846 8260B
trans-1,2-Dichloroethene	50.0	51.7	ug/kg	103	SW846 8260B
Chloromethane	50.0	38.3	ug/kg	77	SW846 8260B
Vinyl chloride	50.0	45.7	ug/kg	91	SW846 8260B
Bromomethane	50.0	37.0	ug/kg	74	SW846 8260B
Chloroethane	50.0	51.2	ug/kg	102	SW846 8260B
Acetone	50.0	48.4	ug/kg	97	SW846 8260B
1,1-Dichloroethene	50.0	49.9	ug/kg	100	SW846 8260B
Methylene chloride	50.0	50.6	ug/kg	101	SW846 8260B
Carbon disulfide	50.0	55.7	ug/kg	111	SW846 8260B
1,1-Dichloroethane	50.0	51.1	ug/kg	102	SW846 8260B
2-Butanone	50.0	54.0	ug/kg	108	SW846 8260B
1,2-Dichloroethene (total)	100	104	ug/kg	104	SW846 8260B
Chloroform	50.0	52.2	ug/kg	104	SW846 8260B
1,1,1-Trichloroethane	50.0	52.9	ug/kg	106	SW846 8260B
Carbon tetrachloride	50.0	53.7	ug/kg	107	SW846 8260B
1,2-Dichloroethane	50.0	54.5	ug/kg	109	SW846 8260B
Benzene	50.0	48.2	ug/kg	96	SW846 8260B
Trichloroethene	50.0	45.2	ug/kg	90	SW846 8260B
1,2-Dichloropropane	50.0	49.2	ug/kg	98	SW846 8260B
Bromodichloromethane	50.0	52.4	ug/kg	105	SW846 8260B
4-Methyl-2-pentanone	50.0	53.2	ug/kg	106	SW846 8260B
cis-1,3-Dichloropropene	50.0	54.2	ug/kg	108	SW846 8260B
Toluene	50.0	53.4	ug/kg	107	SW846 8260B
trans-1,3-Dichloropropene	50.0	63.0	ug/kg	126	SW846 8260B
1,1,2-Trichloroethane	50.0	55.2	ug/kg	110	SW846 8260B
2-Hexanone	50.0	65.3	ug/kg	131	SW846 8260B
Tetrachloroethene	50.0	42.8	ug/kg	86	SW846 8260B
Dibromochloromethane	50.0	53.3	ug/kg	107	SW846 8260B
Chlorobenzene	50.0	53.7	ug/kg	107	SW846 8260B
Ethylbenzene	50.0	53.8	ug/kg	108	SW846 8260B
Styrene	50.0	53.2	ug/kg	106	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #: F4H120314 Work Order #: GNF9N1AC Matrix.....: SOLID
LCS Lot-Sample#: F4H190000-079

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Bromoform	50.0	51.6	ug/kg	103	SW846 8260B
1,1,2,2-Tetrachloroethane	50.0	54.3	ug/kg	109	SW846 8260B
m-Xylene & p-Xylene	100	107	ug/kg	107	SW846 8260B
o-Xylene	50.0	53.3	ug/kg	107	SW846 8260B
1,3-Dichlorobenzene	50.0	52.2	ug/kg	104	SW846 8260B
1,4-Dichlorobenzene	50.0	50.6	ug/kg	101	SW846 8260B
1,2-Dichlorobenzene	50.0	51.4	ug/kg	103	SW846 8260B
Bromobenzene	50.0	50.2	ug/kg	100	SW846 8260B
Bromo-chloromethane	50.0	49.7	ug/kg	99	SW846 8260B
sec-Butylbenzene	50.0	51.7	ug/kg	103	SW846 8260B
tert-Butylbenzene	50.0	46.6	ug/kg	93	SW846 8260B
Allyl chloride	50.0	57.3	ug/kg	115	SW846 8260B
2-Chlorotoluene	50.0	56.4	ug/kg	113	SW846 8260B
4-Chlorotoluene	50.0	52.1	ug/kg	104	SW846 8260B
Cyclohexanone	500	703	ug/kg	141	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	50.0	54.4	ug/kg	109	SW846 8260B
1,2-Dibromomethane (EDB)	50.0	53.0	ug/kg	106	SW846 8260B
trans-1,4-Dichloro-2-butene	50.0	57.7	ug/kg	115	SW846 8260B
Dichlorodifluoromethane (Freon 12)	50.0	34.0	ug/kg	68	SW846 8260B
1,3-Dichloropropane	50.0	56.6	ug/kg	113	SW846 8260B
2,2-Dichloropropane	50.0	53.3	ug/kg	107	SW846 8260B
1,1-Dichloropropene	50.0	55.5	ug/kg	111	SW846 8260B
Ethyl methacrylate	50.0	58.0	ug/kg	116	SW846 8260B
Freon 113	50.0	54.2	ug/kg	108	SW846 8260B
Hexachlorobutadiene	50.0	46.3	ug/kg	93	SW846 8260B
n-Hexane	50.0	48.3	ug/kg	97	SW846 8260B
Isopropylbenzene	50.0	60.0	ug/kg	120	SW846 8260B
4-Isopropyltoluene	50.0	55.5	ug/kg	111	SW846 8260B
Methyl methacrylate	50.0	58.0	ug/kg	116	SW846 8260B
Methyl tert-butyl ether (MTBE)	50.0	54.5	ug/kg	109	SW846 8260B
Naphthalene	50.0	46.1	ug/kg	92	SW846 8260B
n-Propylbenzene	50.0	55.8	ug/kg	112	SW846 8260B
1,1,1,2-Tetrachloroethane	50.0	51.0	ug/kg	102	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #: F4H120314 Work Order #: GNF9N1AC Matrix.....: SOLID
LCS Lot-Sample#: F4H190000-079

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT RECOVERY	METHOD
Tetrahydrofuran	50.0	46.6	ug/kg	93	SW846 8260B
1,2,3-Trichlorobenzene	50.0	46.6	ug/kg	93	SW846 8260B
1,2,4-Trichloro- benzene	50.0	47.5	ug/kg	95	SW846 8260B
Trichlorofluoromethane	50.0	51.8	ug/kg	104	SW846 8260B
1,3,5-Trimethylbenzene	50.0	54.2	ug/kg	108	SW846 8260B
Ethyl ether	50.0	44.0	ug/kg	88	SW846 8260B
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS		
Toluene-d8		101	(88 - 115)		
Dibromofluoromethane		94	(84 - 120)		
1,2-Dichloroethane-d4		98	(78 - 122)		
4-Bromofluorobenzene		97	(80 - 120)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: F4H120314 Work Order #....: GM67V1AC Matrix.....: SOLID
 LCS Lot-Sample#: F4H140000-121
 Prep Date.....: 08/14/04 Analysis Date...: 08/17/04
 Prep Batch #:....: 4227121
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Phenol	3330	2750	ug/kg	82	SW846 8270C
bis(2-Chloroethyl)-ether	3330	2770	ug/kg	83	SW846 8270C
2-Chlorophenol	3330	2730	ug/kg	82	SW846 8270C
2-Methylphenol	3330	2670	ug/kg	80	SW846 8270C
2,2'-oxybis(1-Chloropropane)	3330	2780	ug/kg	83	SW846 8270C
3-Methylphenol & 4-Methylphenol	3330	2730	ug/kg	82	SW846 8270C
N-Nitrosodi-n-propyl-amine	3330	3090	ug/kg	93	SW846 8270C
Hexachloroethane	3330	2670	ug/kg	80	SW846 8270C
Nitrobenzene	3330	2390	ug/kg	72	SW846 8270C
Isophorone	3330	3020	ug/kg	91	SW846 8270C
2-Nitrophenol	3330	2930	ug/kg	88	SW846 8270C
2,4-Dimethylphenol	3330	2790	ug/kg	84	SW846 8270C
bis(2-Chloroethoxy)methane	3330	2960	ug/kg	89	SW846 8270C
2,4-Dichlorophenol	3330	2860	ug/kg	86	SW846 8270C
1,2,4-Trichlorobenzene	3330	2900	ug/kg	87	SW846 8270C
Naphthalene	3330	2930	ug/kg	88	SW846 8270C
4-Chloroaniline	3330	2340	ug/kg	70	SW846 8270C
Hexachlorobutadiene	3330	2840	ug/kg	85	SW846 8270C
4-Chloro-3-methylphenol	3330	2850	ug/kg	85	SW846 8270C
2-Methylnaphthalene	3330	2840	ug/kg	85	SW846 8270C
Hexachlorocyclopentadiene	3330	3690	ug/kg	111	SW846 8270C
2,4,6-Trichlorophenol	3330	2940	ug/kg	88	SW846 8270C
2,4,5-Trichlorophenol	3330	2960	ug/kg	89	SW846 8270C
2-Nitroaniline	3330	3100	ug/kg	93	SW846 8270C
Dimethyl phthalate	3330	3060	ug/kg	92	SW846 8270C
Acenaphthylene	3330	3200	ug/kg	96	SW846 8270C

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: F4H120314 Work Order #....: GM67V1AC Matrix.....: SOLID
 LCS Lot-Sample#: F4H140000-121

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2,6-Dinitrotoluene	3330	3200	ug/kg	96	SW846 8270C
3-Nitroaniline	3330	2430	ug/kg	73	SW846 8270C
Acenaphthene	3330	3040	ug/kg	91	SW846 8270C
2,4-Dinitrophenol	3330	1430	ug/kg	43	SW846 8270C
4-Nitrophenol	3330	2960	ug/kg	89	SW846 8270C
Dibenzofuran	3330	2900	ug/kg	87	SW846 8270C
2,4-Dinitrotoluene	3330	3320	ug/kg	100	SW846 8270C
Diethyl phthalate	3330	3130	ug/kg	94	SW846 8270C
4-Chlorophenyl phenyl ether	3330	3010	ug/kg	90	SW846 8270C
Fluorene	3330	3100	ug/kg	93	SW846 8270C
4-Nitroaniline	3330	3020	ug/kg	91	SW846 8270C
4,6-Dinitro- 2-methylphenol	3330	2270	ug/kg	68	SW846 8270C
N-Nitrosodiphenylamine	3330	3370	ug/kg	101	SW846 8270C
4-Bromophenyl phenyl ether	3330	3170	ug/kg	95	SW846 8270C
Hexachlorobenzene	3330	3130	ug/kg	94	SW846 8270C
Pentachlorophenol	3330	3020	ug/kg	91	SW846 8270C
Phenanthrone	3330	3050	ug/kg	91	SW846 8270C
Anthracene	3330	3150	ug/kg	95	SW846 8270C
Carbazole	3330	3150	ug/kg	94	SW846 8270C
Di-n-butyl phthalate	3330	3350	ug/kg	100	SW846 8270C
Fluoranthene	3330	3230	ug/kg	97	SW846 8270C
Pyrene	3330	3300	ug/kg	99	SW846 8270C
Butyl benzyl phthalate	3330	3390	ug/kg	102	SW846 8270C
3,3'-Dichlorobenzidine	3330	2620	ug/kg	79	SW846 8270C
Benzo(a)anthracene	3330	3340	ug/kg	100	SW846 8270C
Chrysene	3330	3470	ug/kg	104	SW846 8270C
bis(2-Ethylhexyl) phthalate	3330	3530	ug/kg	106	SW846 8270C
Di-n-octyl phthalate	3330	3950 a	ug/kg	118	SW846 8270C
Benzo(b)fluoranthene	3330	4200 a	ug/kg	126	SW846 8270C
Benzo(k)fluoranthene	3330	3970	ug/kg	119	SW846 8270C
Benzo(a)pyrene	3330	4090 a	ug/kg	123	SW846 8270C
Indeno(1,2,3-cd)pyrene	3330	4380 a	ug/kg	131	SW846 8270C
Dibenz(a,h)anthracene	3330	4340	ug/kg	130	SW846 8270C

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: F4H120314 Work Order #...: GM67V1AC Matrix.....: SOLID
 LCS Lot-Sample#: F4H140000-121
 Prep Date.....: 08/14/04 Analysis Date...: 08/17/04
 Prep Batch #: 4227121
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>METHOD</u>
Phenol	3330	2750	ug/kg	82	SW846 8270C
2-Chlorophenol	3330	2730	ug/kg	82	SW846 8270C
N-Nitrosodi-n-propyl-amine	3330	3090	ug/kg	93	SW846 8270C
1,2,4-Trichloro-benzene	3330	2900	ug/kg	87	SW846 8270C
4-Chloro-3-methylphenol	3330	2850	ug/kg	85	SW846 8270C
Acenaphthene	3330	3040	ug/kg	91	SW846 8270C
4-Nitrophenol	3330	2960	ug/kg	89	SW846 8270C
2,4-Dinitrotoluene	3330	3320	ug/kg	100	SW846 8270C
Diethyl phthalate	3330	3130	ug/kg	94	SW846 8270C
Pentachlorophenol	3330	3020	ug/kg	91	SW846 8270C
Di-n-butyl phthalate	3330	3350	ug/kg	100	SW846 8270C
Pyrene	3330	3300	ug/kg	99	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorophenol	84	(50 - 98)
Phenol-d5	86	(51 - 95)
Nitrobenzene-d5	89	(50 - 111)
2-Fluorobiphenyl	95	(57 - 117)
2,4,6-Tribromophenol	92	(53 - 108)
Terphenyl-d14	92	(49 - 107)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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D. Ayres

7/19/05

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LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: F4H120314 Work Order #....: GPQTA1AC Matrix.....: SOLID
LCS Lot-Sample#: F4I080000-070
Prep Date.....: 09/07/04 Analysis Date...: 09/07/04
Prep Batch #....: 4252070
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Volatile Petroleum Hydrocarbons	1.00	0.998	mg/kg	100	SW846 8015 NO
SURROGATE		PERCENT <u>RECOVERY</u>		RECOVERY LIMITS	
Trifluorotoluene		106		(85 - 108)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: F4H120314 Work Order #....: GM4PK1AC Matrix.....: SOLID
LCS Lot-Sample#: F4H130000-332
Prep Date.....: 08/13/04 Analysis Date...: 08/18/04
Prep Batch #....: 4226332
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
TPH - Diesel Range - WTPH	83.3	60.7	mg/kg	73	SW846 8015 MO
SURROGATE		PERCENT <u>RECOVERY</u>		RECOVERY <u>LIMITS</u>	
o-Terphenyl		101		(78 - 150)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: F4H120314 Work Order #....: GM6611AC Matrix.....: SOLID
LCS Lot-Sample#: F4H140000-118
Prep Date.....: 08/14/04 Analysis Date...: 08/17/04
Prep Batch #....: 4227118
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT RECOVERY	METHOD
Aroclor 1016	167	189	ug/kg	114	SW846 8082
Aroclor 1260	167	192	ug/kg	115	SW846 8082
<hr/>					
SURROGATE	PERCENT RECOVERY		RECOVERY LIMITS		
Decachlorobiphenyl	128		(68 - 150)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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METALS

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F4H120314

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: F4H130000-071 Prep Batch #...: 4226071							
Antimony	65.2	51.5	mg/kg	79	SW846 6010B	08/13-08/20/04	GM2611AQ
			Dilution Factor:	1			
Arsenic	110	116	mg/kg	106	SW846 6010B	08/13-08/20/04	GM2611AR
			Dilution Factor:	1			
Barium	334	356	mg/kg	106	SW846 6010B	08/13-08/20/04	GM2611AT
			Dilution Factor:	1			
Beryllium	133	138	mg/kg	104	SW846 6010B	08/13-08/20/04	GM2611AU
			Dilution Factor:	1			
Cadmium	101	105	mg/kg	104	SW846 6010B	08/13-08/20/04	GM2611AV
			Dilution Factor:	1			
Chromium	167	176	mg/kg	105	SW846 6010B	08/13-08/20/04	GM2611AW
			Dilution Factor:	1			
Copper	118	129	mg/kg	109	SW846 6010B	08/13-08/20/04	GM2611AX
			Dilution Factor:	1			
Lead	102	108	mg/kg	106	SW846 6010B	08/13-08/20/04	GM2611A0
			Dilution Factor:	1			
Nickel	127	134	mg/kg	106	SW846 6010B	08/13-08/20/04	GM2611A1
			Dilution Factor:	1			
Selenium	166	175	mg/kg	105	SW846 6010B	08/13-08/20/04	GM2611A2
			Dilution Factor:	1			
Silver	82.9	85.1	mg/kg	103	SW846 6010B	08/13-08/20/04	GM2611A3
			Dilution Factor:	1			
Bismuth	200	196	mg/kg	98	SW846 6010B	08/13-08/23/04	GM2611A4
			Dilution Factor:	1			
Boron	59.1	61.6	mg/kg	104	SW846 6010B	08/13-08/23/04	GM2611A5
			Dilution Factor:	1			

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STL ST. LOUIS

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: F4H120314

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT	PREPARATION-	WORK
	AMOUNT	AMOUNT			
LCS Lot-Sample#:	F4H170000-117	Prep Batch #...:	4230117		
Mercury	4.04	3.65	mg/kg	90	SW846 7471A
			Dilution Factor:	5	08/17/04 GM9QG1AC

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #....: F4H120314

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT	RECVRY	RPD	METHOD	PREPARATION-	PREP
	AMOUNT	AMOUNT	UNITS				ANALYSIS DATE	BATCH #
Fluoride			WO#:GNK0T1AC-LCS/GNK0T1AD-LCSD	LCS	Lot-Sample#:	F4H200000-263		
	5.00	5.15	mg/kg	103		MCAWW 300.0A	08/18/04	4233263
	5.00	4.84	mg/kg	97	6.3	MCAWW 300.0A	08/18/04	4233263
			Dilution Factor: 1					
Nitrate			WO#:GNK0W1AC-LCS/GNK0W1AD-LCSD	LCS	Lot-Sample#:	F4H200000-264		
	2.00	1.94	mg/kg	97		MCAWW 300.0A	08/18/04	4233264
	2.00	2.02	mg/kg	101	4.2	MCAWW 300.0A	08/18/04	4233264
			Dilution Factor: 1					
Nitrate/Nitrite as N			WO#:GNNM11AC-LCS/GNNM11AD-LCSD	LCS	Lot-Sample#:	F4H200000-377		
	4.00	3.62	mg/kg	90		MCAWW 353.1	08/18-08/21/04	4233377
	4.00	3.74	mg/kg	94	3.3	MCAWW 353.1	08/18-08/21/04	4233377
			Dilution Factor: 1					
Nitrite			WO#:GNK001AC-LCS/GNK001AD-LCSD	LCS	Lot-Sample#:	F4H200000-265		
	0.800	0.838	mg/kg	105		MCAWW 300.0A	08/18/04	4233265
	0.800	0.903	mg/kg	113	7.5	MCAWW 300.0A	08/18/04	4233265
			Dilution Factor: 1					
Nitrogen, as Ammonia			WO#:GM9HA1AC-LCS/GM9HA1AD-LCSD	LCS	Lot-Sample#:	F4H170000-066		
	4.00	3.72	mg/kg	93		MCAWW 350.1	08/16/04	4230066
	4.00	3.88	mg/kg	97	4.2	MCAWW 350.1	08/16/04	4230066
			Dilution Factor: 1					
Phosphate as P, Ortho			WO#:GNK021AC-LCS/GNK021AD-LCSD	LCS	Lot-Sample#:	F4H200000-266		
	40.0	36.3	mg/kg	91		MCAWW 300.0A	08/18/04	4233266
	40.0	37.0	mg/kg	93	2.0	MCAWW 300.0A	08/18/04	4233266
			Dilution Factor: 1					
Sulfate			WO#:GNK051AC-LCS/GNK051AD-LCSD	LCS	Lot-Sample#:	F4H200000-267		
	40.0	37.4	mg/kg	94		MCAWW 300.0A	08/18/04	4233267
	40.0	37.7	mg/kg	94	0.69	MCAWW 300.0A	08/18/04	4233267
			Dilution Factor: 1					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #....: F4H120314

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (solid)				Work Order #: GMB1J1AA	LCS Lot-Sample#: F4H160000-405		
	7.00	7.03	No Units	100	SW846 9045A	08/16/04	4229405
				Dilution Factor: 1			
Hexavalent Chromium				Work Order #: GNPAG1AC	LCS Lot-Sample#: F4H230000-221		
	2.00	1.95	mg/kg	98	SW846 7196A	08/20-08/23/04	4236221
				Dilution Factor: 1			
Oil and Grease (Gravimetric)				Work Order #: GPNWT1AC	LCS Lot-Sample#: F4I070000-073		
	3330	3600	mg/kg	108	SW846 9071A	09/06-09/07/04	4251073
				Dilution Factor: 1			
Total Cyanide				Work Order #: GN08D1AC	LCS Lot-Sample#: F4H260000-316		
	5.00	5.36	mg/kg	107	SW846 9010A	08/26/04	4239316
				Dilution Factor: 1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F4H120314

Matrix.....: SOLID

Date Sampled...: 07/21/04

Date Received...: 08/12/04

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	PERCNT RPD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: F4H120314-001 Prep Batch #...: 4226071

% Moisture....: 7.3

Selenium

ND	216	209	mg/kg	97	SW846	6010B	08/13-08/20/04	GM17P1CN
ND	216	211	mg/kg	98	0.64	SW846	6010B	08/13-08/20/04 GM17P1CP

Dilution Factor: 1

Silver

2.2	5.39	9.71 N	mg/kg	139	SW846	6010B	08/13-08/20/04	GM17P1CQ
2.2	5.39	7.45	mg/kg	97	26	SW846	6010B	08/13-08/20/04 GM17P1CR

Dilution Factor: 1

Bismuth

144	216	333	mg/kg	88	SW846	6010B	08/13-08/23/04	GM17P1CT
144	216	331	mg/kg	87	0.55	SW846	6010B	08/13-08/23/04 GM17P1CU

Dilution Factor: 1

Boron

6.5	216	217	mg/kg	98	SW846	6010B	08/13-08/23/04	GM17P1CV
6.5	216	213	mg/kg	96	1.9	SW846	6010B	08/13-08/23/04 GM17P1CW

Dilution Factor: 1

MS Lot-Sample #: F4H120314-001 Prep Batch #...: 4230117

% Moisture....: 7.3

Mercury

0.92	0.180	1.22 N	mg/kg	172	SW846	7471A	08/17/04	GM17P1DR
0.92	0.180	0.901 N	mg/kg	0.0	0.0	SW846	7471A	08/17/04 GM17P1DT

Dilution Factor: 1

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

STL ST. LOUIS

WET CHEMISTRY

LOT # F4H120314

W04150

59

STL ST. LOUIS

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: F4H120314
Date Sampled...: 08/18/04

Date Received...: 08/28/04

Matrix.....: SOLID

PARAMETER	SAMPLE SPIKE	MEASRD	PERCNT		METHOD	PREPARATION-	PREP		
	AMOUNT	AMT	AMOUNT	UNITS		RECVRY	RPD	ANALYSIS DATE	BATCH #
Hexavalent Chromium	ND	43.1	36.1 N	mg/kg	84	SW846	7196A	08/20-08/23/04 4236221	
	ND	43.1	37.5	mg/kg	87	3.8	SW846	7196A	08/20-08/23/04 4236221
	Dilution Factor: 1								

* Moisture.....: 7.3

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: F4H120314
Date Sampled....: 07/21/04

Date Received..: 08/12/04

Matrix.....: SOLID

Percent Moisture: 0.0

PARAMETER	SAMPLE	SPIKE	MEASURED	PERCENT	PREPARATION-	PREP		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	METHOD	ANALYSIS DATE	BATCH #
Fluoride	ND	20.0	19.9	mg/kg	100	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 300.0A	08/18-08/19/04	4233263
Nitrate	1.9	5.00	5.96	mg/kg	81	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 300.0A	08/18-08/19/04	4233264
Nitrate/Nitrite as N	2.1	5.00	6.26	N mg/kg	83	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 353.1	08/18-08/21/04	4233377
Nitrite	ND	1.00	1.19	mg/kg	119	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 300.0A	08/18-08/19/04	4233265
Nitrogen, as Ammonia	0.83	5.00	5.15	N mg/kg	86	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 350.1	08/16/04	4230066
Oil and Grease (Gravimetric)	ND	3330	3200	mg/kg	96	MS Lot-Sample #:	F4H300104-001	
				Dilution Factor:	1	SW846 9071A	09/06-09/07/04	4251073
Phosphate as P, Ortho	ND	40.0	42.3	mg/kg	106	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 300.0A	08/18-08/19/04	4233266
Sulfate	8.0	40.0	45.7	mg/kg	94	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	MCAWW 300.0A	08/18-08/19/04	4233267
Total Cyanide	ND	5.00	5.40	mg/kg	108	MS Lot-Sample #:	F4H120314-001	
				Dilution Factor:	1	SW846 9010A	08/26/04	4239316

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

STL ST. LOUIS

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #: F4H120314 Work Order #: GM17P-SMP Matrix.....: SOLID

GM17P-DUP

Date Sampled...: 07/21/04

Date Received.: 08/12/04

% Moisture.....: 7.3

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate/Nitrite as N	2.1	2.1	mg/kg	0.95	(0-30)	SD Lot-Sample #: F4H120314-001 MCAWW 353.1	08/18/04	4233377
			Dilution Factor:	1				
Fluoride	ND	ND	mg/kg	0	(0-30)	SD Lot-Sample #: F4H120314-001 MCAWW 300.0A	08/18-08/19/04	4233263
			Dilution Factor:	1				
Nitrate	1.9 B	1.9 B	mg/kg	2.4	(0-30)	SD Lot-Sample #: F4H120314-001 MCAWW 300.0A	08/18-08/19/04	4233264
			Dilution Factor:	1				
Nitrite	ND	ND	mg/kg	0	(0-30)	SD Lot-Sample #: F4H120314-001 MCAWW 300.0A	08/18-08/19/04	4233265
			Dilution Factor:	1				
Phosphate as P, Ortho	ND	ND	mg/kg	0	(0-30)	SD Lot-Sample #: F4H120314-001 MCAWW 300.0A	08/18-08/19/04	4233266
			Dilution Factor:	1				
Sulfate	8.0 B	7.4 B	mg/kg	8.7	(0-30)	SD Lot-Sample #: F4H120314-001 MCAWW 300.0A	08/18-08/19/04	4233267
			Dilution Factor:	1				
Total Cyanide	ND	ND	mg/kg	0	(0-30)	SD Lot-Sample #: F4H120314-001 SW846 9010A	08/26/04	4239316
			Dilution Factor:	1				
pH (solid)	9.2	9.1	No Units	0.11	(0-30)	SD Lot-Sample #: F4H120314-001 SW846 9045A	08/16/04	4229405
			Dilution Factor:	1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

STL ST. LOUIS

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F4H120314 Work Order #...: GN7DF-SMP Matrix.....: SOLID
 GN7DF-DUP

Date Sampled...: 08/18/04 Date Received.: 08/28/04

% Moisture....: 0.0

<u>PARAM</u>	<u>RESULT</u>	<u>DUPPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>	<u>BATCH #</u>
Oil and Grease (Gravimetric)	ND		mg/kg	0	(0-35)	SW846 9071A	ANALYSIS DATE	09/06-09/07/04	4251073
					Dilution Factor: 1				